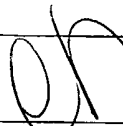


<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/601,585	TAKAGI ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Robert R. Koehler	1775	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the originally-filed application papers.
2. ☒ The allowed claim(s) is/are 1-10.
3. ☒ The drawings filed on 24 June 2003 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |  |
|---|--|
| <ol style="list-style-type: none"> <li>1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)</li> <li>2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br/>Paper No./Mail Date <u>06242003; 12172003</u></li> <li>4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br/>of Biological Material</li> </ol> | <ol style="list-style-type: none"> <li>5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</li> <li>6. <input type="checkbox"/> Interview Summary (PTO-413),<br/>Paper No./Mail Date _____.</li> <li>7. <input type="checkbox"/> Examiner's Amendment/Comment</li> <li>8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance</li> <li>9. <input type="checkbox"/> Other _____.</li> </ol> |
|---|--|



**ROBERT R. KOEHLER  
PRIMARY EXAMINER  
ART UNIT 1775**

**DETAILED ACTION*****Allowable Subject Matter***

Claims 1 to 10 are allowed.

The following is an examiner's statement of reasons for allowance: The prior art does not teach, suggest, or disclose applicants' claimed aluminum-coated structural member comprising a steel substrate and an Al-Si-Fe alloy layer formed on the surface of the steel substrate wherein the Al-Si-Fe alloy layer must possess a very low oxide content (by weight), and the alloy layer is formed to contain a softer metallurgical region having a thickness greater than or equal to 50% of the thickness of the alloy layer and extending from the surface of the steel sheet toward the outer surface of the alloy layer. The prior art does not recognize the importance of forming a ductile region within an Al-Si-Fe alloy coating layer and minimizing the total oxide weight within the entire Al-Si-Fe alloy layer for the purpose of producing a coated steel sheet having improved metal-working properties. Also, the prior art does not teach, suggest, or disclose applicants' claimed method of producing an aluminum-coated steel sheet structural member including the step of holding the aluminum-coated steel sheet in a temperature range of 900 to 950° C for a period of 2 to 8 minutes. The Examiner believes that the prior art does not recognize the usage of any high-temperature anneal (e.g., on the order of 900 to 950° C) for an aluminum-coated steel sheet followed by cooling to a temperature in the range of 700 to 800° C. The Examiner cites U.S. Patent No. 5,789,089 (Maki, et al.) as relevant prior art. Maki, et al. teaches a hot-dipped aluminum coated steel sheet and its production whereby the process taught by Maki, et al. includes an anneal step of the hot-dipped aluminum coated steel sheet in a temperature range of 300 to 530° C. Maki, et al. does not teach or reasonably suggest the usage of higher annealing temperatures, and the significantly lower annealing temperature range taught by Maki, et al. makes the hot-dipped aluminum coating layer more flexible. See line 65 in column 14 to line 61 in column 15 of the Maki, et al. patent.

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Robert Koehler whose telephone number is **(571) 272-1536**. The Examiner can normally be reached on Tuesday to Friday from 9:30 AM to 7:00 PM. The Examiner can also be reached on alternate Mondays.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Deborah Jones, can be reached on **(571) 272-1535**. The fax phone number for the organization where this application or proceeding is assigned is **703-872-9306**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at **866-217-9197** (toll-free).



**ROBERT R. KOEHLER  
PRIMARY EXAMINER**

**Art Unit 1775  
July 25, 2004**